

Serial No. 10/817,636

In the Claims:

1. (currently amended) An optoelectronic device, comprising:
a semiconductor substrate;
an array of photodetectors formed adjacent the semiconductor substrate each of said photodetectors having an anode and a cathode;
an array of amplifiers, having input terminals and ground terminals, said anodes of said photodetectors coupled to said input terminals; and
one or more monolithic capacitors configured to capacitively couple each of said cathodes of one or more of the photodetectors to one or more of said ground bias terminals, said capacitors allowing transient voltage applied to said cathode to bypass said photodetector and pass directly to said ground terminal,
wherein a continuous constant bias is applied to said array of photodetectors one or more bias terminals.
2. (original) The optoelectronic device of claim 1 wherein a plurality of monolithic capacitors couple a plurality of said photodetectors to said one or more bias terminals.
3. (original) The optoelectronic device of claim 1 further comprising one or more bias resistors, wherein said one or more bias resistors couple said one or more photodetectors to said one or more bias terminals.
4. (original) The optoelectronic device of claim 1 wherein a separate monolithic capacitor individually couples each of said one or more photodetectors to said one or more bias terminals.
5. (original) The optoelectronic device of claim 1 further comprising a plurality of monolithic bias resistors, wherein a separate bias resistor is coupled between each of said one or more photodetectors and said one or more bias terminal.

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6. (original) The optoelectronic device of claim 1 further comprising a monolithic bias resistor coupled between said one or more photodetectors and a single bias terminal.

7. (original) The optoelectronic device of claim 1 wherein each of said one or more capacitors comprises a dielectric layer formed adjacent to a first electrode and a conductive layer formed adjacent to said dielectric layer and overlapping a portion of said first electrode.